Beyond CASE—Applications Development Barriers and Opportunities

---

Thomas O'Flaherty
Vice President
INPUT

9/24/91

Agenda

- CASE Status
- Forecast Factors
- Technical Issues
- Impacts on Vendors
- Critical Issues

INPUT

Notes

9/24/91

CASE Status

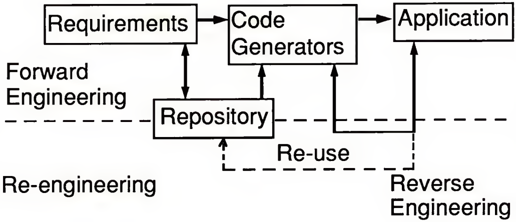
INPUT

AD- 78

Notes

9/24/91

CASE Components



Requirements

Code Generators

Application

Forward Engineering

Repository

Re-use

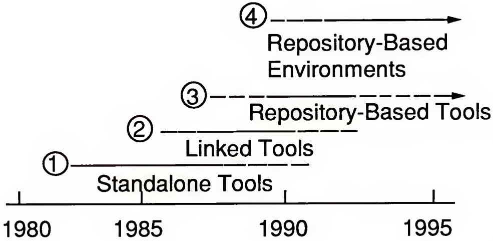
Re-engineering

Reverse Engineering

INPUT

Notes

CASE Stages



④ Repository-Based Environments

③ Repository-Based Tools

② Linked Tools

① Standalone Tools

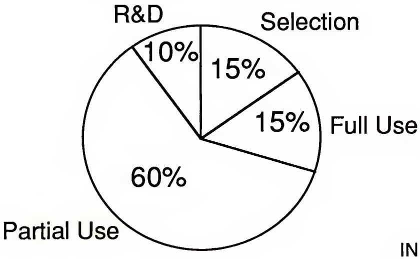
1980 1985 1990 1995

INPUT

Notes

6/14/91

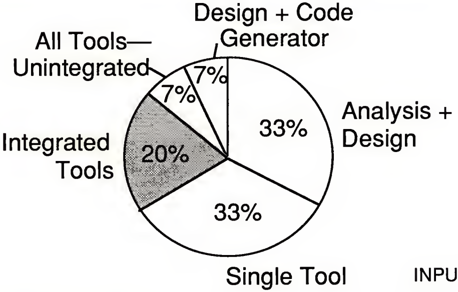
1991 CASE Use



INPUT

Notes

Degree of CASE Tool Integration



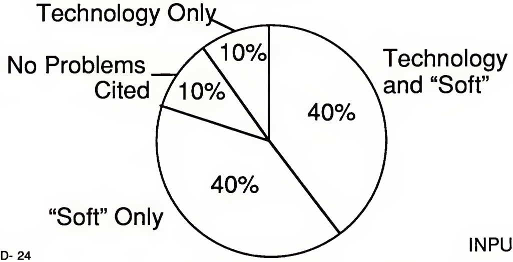
AD- 21

INPUT

Notes

6/14/91

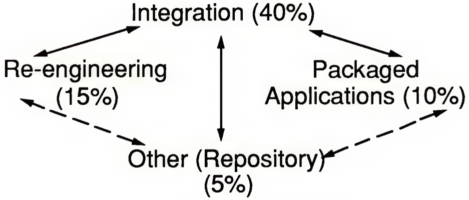
Technology vs. “Soft” CASE Problems



INPUT

Notes

Technology Issues—Relationships



Integration (40%)

Re-engineering (15%)

Packaged Applications (10%)

Other (Repository) (5%)

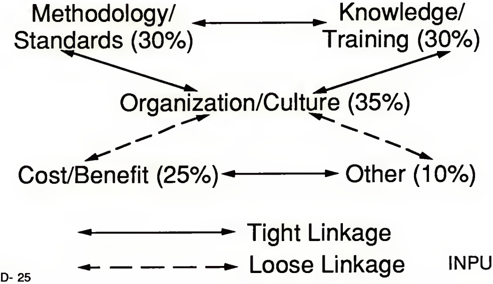
⟷ Tight Linkage

⇠ ⇢ Loose Linkage

INPUT

Notes

“Soft” Issues—Relationships



Methodology/ Standards (30%)

Knowledge/ Training (30%)

Organization/Culture (35%)

Cost/Benefit (25%)

Other (10%)

Tight Linkage

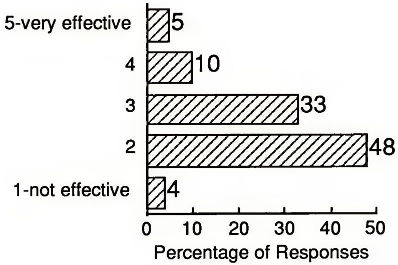
Loose Linkage

INPUT

Notes

6/14/91

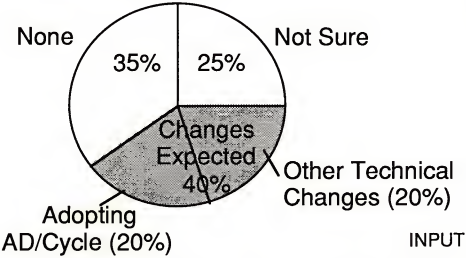
Effectiveness of CASE



INPUT

Notes

Expected Changes in CASE Plans

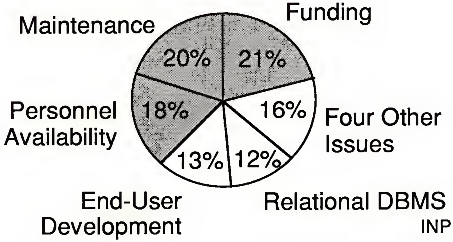


INPUT

Notes

6/14/91

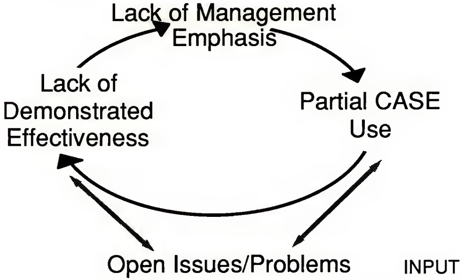
Most Important Systems Development Issues



INPUT

Notes

CASE's Vicious Circle



Lack of Management Emphasis

Partial CASE Use

Open Issues/Problems

Lack of Demonstrated Effectiveness

INPUT

Notes

6/14/91

CASE Market Forecast Factors

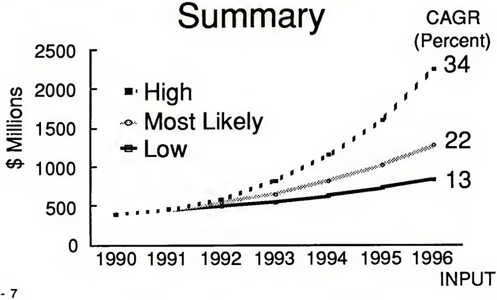
INPUT

AD- 6

Notes

6/14/91

CASE Product Growth Scenarios Summary



AD- 7

Notes

6/14/91

Major Variables

- Re-engineering
- Organizational readiness

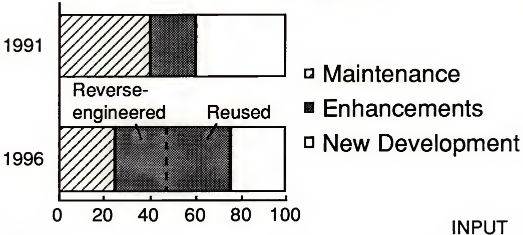
INPUT

AD- 79

Notes

9/24/91

New, Maintenance and Enhancement Activities: 1991 and 1996



INPUT

AD- 10

Notes

6/14/91

Organizational Readiness

- Cultural/organizational readiness
- Development methodology
- Measurement
- CASE planning

INPUT

Notes

CASE Technical Issues

INPUT

AD- 80

Notes

9/24/91

Integration Trends—IBM and Non-IBM Platforms

Tool Architectures	IBM Platform	Non-IBM Platform
Individual	Obsolete	Prevalent
Integrated Tools	Prevalent	Emerging
Repository-based	Emerging	On Horizon

INPUT

AD- 29a

Notes

6/14/91

Integration Trends—IBM and Non-IBM Platforms

Tool Standards	IBM Platform	Non-IBM Platform
AD/Cycle	De Facto	Possible
Other Platform-Specific	Under Pressure	Prevalent

INPUT

AD- 29b

Notes

6/14/91

Integration Trends—IBM and Non-IBM Platforms

Tool Standards	IBM Platform	Non-IBM Platform
Cross-Platform	Unclear	Possible
Methodologies	AD/Cycle-Driven	Mixed Trends

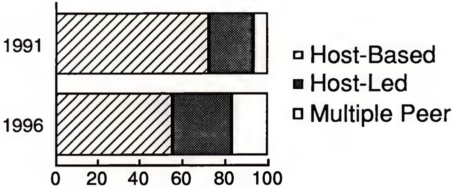
AD- 29c

INPUT

Notes

6/14/91

Target Environments 1991 and 1996



INPUT

Notes

Re-engineering Options

Factor	Reverse-eng. Application	Re-used Application
Platforms	Unchanged	Changed
Host/workstation	Unchanged	Changed
Applications linkage	Loose	Tight
End-user involvement	Moderate	Intensive
Repository experience	Low	High

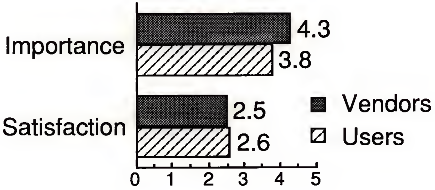
INPUT

AD- 33

Notes

9/24/91

Re-engineering



INPUT

Notes

6/14/91

CASE Impacts on Vendors

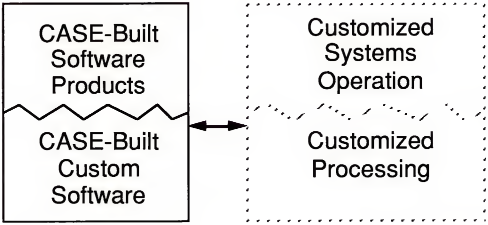
INPUT

AD-58

Notes

6/14/91

Business System Solutions



CASE-Built Software Products

CASE-Built Custom Software

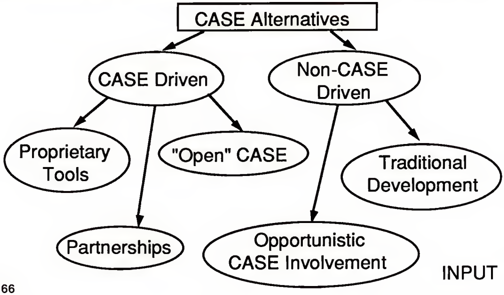
Customized Systems Operation

Customized Processing

INPUT

Notes

Professional Services/SI Firms



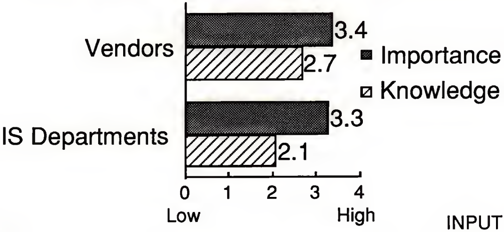
INPUT

AD-66

Notes

6/14/91

Impact of CASE on Other Software Product Vendors



INPUT

AD- 64

Notes

6/14/91

"Insourcing": Potential Competition

- CASE offers chance to overcome in-house development inadequacies
- In-house staff can understand:
  - Enterprise
  - Industry
  - Business issues

INPUT

AD-72

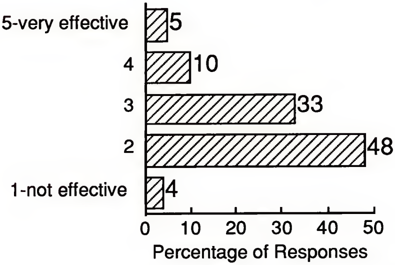
Notes

Critical Issues

INPUT

Notes

Effectiveness of CASE



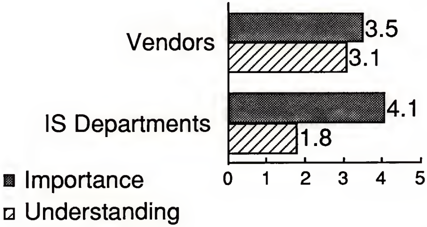
INPUT

AD- 22

Notes

6/14/91

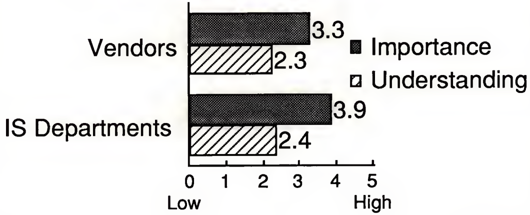
CASE Standards



INPUT

Notes

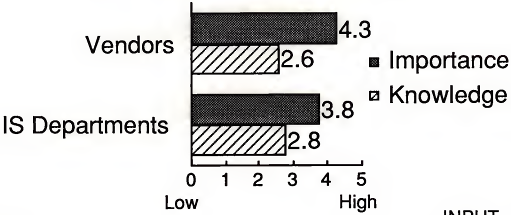
CASE Impact on End-User Departments



INPUT

Notes

Understanding Reasons for CASE Success



INPUT

AD- 30

Notes

6/14/91

CASE Equals

- CASE = Magic bullet?
- CASE = Component of application development process?

INPUT

Notes

Development Issues

- Why do projects succeed or fail? What is/will be role of CASE?
- What is the *minimum* level of readiness for benefiting from tools and methodologies?

INPUT

AD- 83a

Notes

9/24/91

Development Issues

- How important are orgazination and culture? How easily can these be changed?

INPUT

AD- 83b

Notes

9/24/91

Application Development Components

- Success measures
- Tools
- Methodologies
- Training
- Skills
- HW/SW platforms
- Project characteristics
- Metrics
- Planning

INPUT

Notes

Applications Development Data Base

Data

- Success measures
- Tools
- Training
- Platforms
- Planning

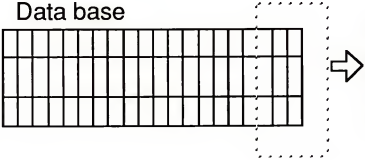
Uses

- Benchmarks
- Success factors
- Readiness gaps
- Service needs

INPUT

Notes

Specific Applications Development Situations



Data base

Subset (e.g., size, CASE stage, project type)

INPUT

AD- 86

Notes

9/24/91

Thomas J. O'Flaherty
Vice President

PROFILE

CAPABILITIES

- Design and manage research projects for determining market needs, competitive positioning, and the viability of products and services.
- Provide consulting advice on market strategy, new products and services, growth/diversification alternatives. Two systems initiatives added $13 million and $21 million to the bottom line.
- Experience includes over 100 research and consulting assignments for clients ranging from start-ups to firms such as ADP, Ameritech, AT&T, Citicorp, Continental Insurance, Coopers & Lybrand, General Motors, GTE, IBM, ITT, Marriott Corporation, McKinsey & Co., Metaphor, Mobil, and Unisys.

BACKGROUND

- Director of Research, Broadview Associates. Responsible for professional support functions (company analysis, client consulting, proprietary data base development) for an international investment banking specializing in information technology.
- Principal, Information Service Strategies. Consultant on markets and products. Marketing director for start-up firm offering innovative PC communications product.
- Principal Consultant, INPUT. Directed research and consulting projects for a variety of clients.
- Hands-on experience at every IS department level, including IS Director.

EDUCATION/PROFESSIONAL ACTIVITIES

- B.A., Colgate University
- Certificate in Data Processing (CDP)
- Member of the ACM, the Society for Information Management, and a founding member of the American Association for Medical Systems and Informatics. Extensive speaking to professional groups.
- Regular contributor to *Computerworld* Softline column since 1983.